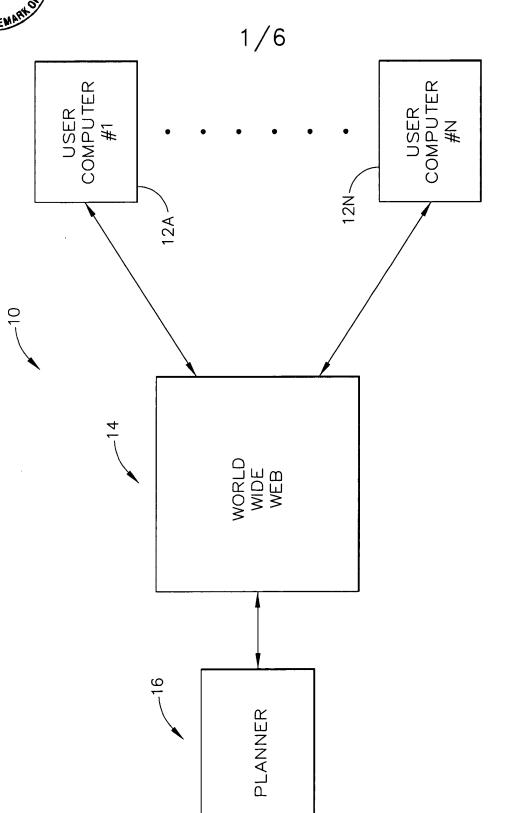
REPLACEMENT SHEET
PROCESS PLANNING FOR DISTRIBUTED MANUFACTURING AND REPAIR INVENTOR: CHRISTOPHER R. HARMMOND, et al. DOCKET: 13DV-13576 ATTY: ROBERT B. REESER, III; PHONE: (314) 621-5070



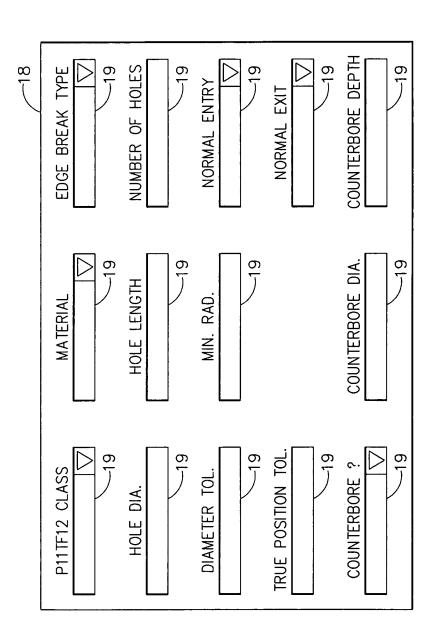


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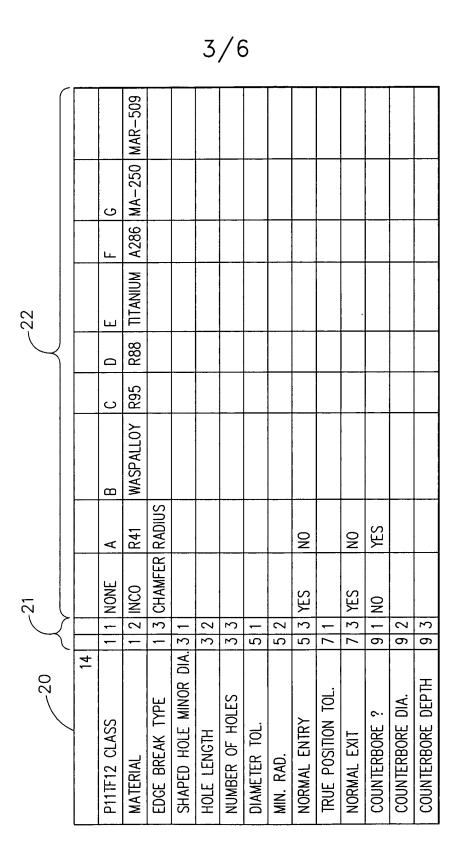
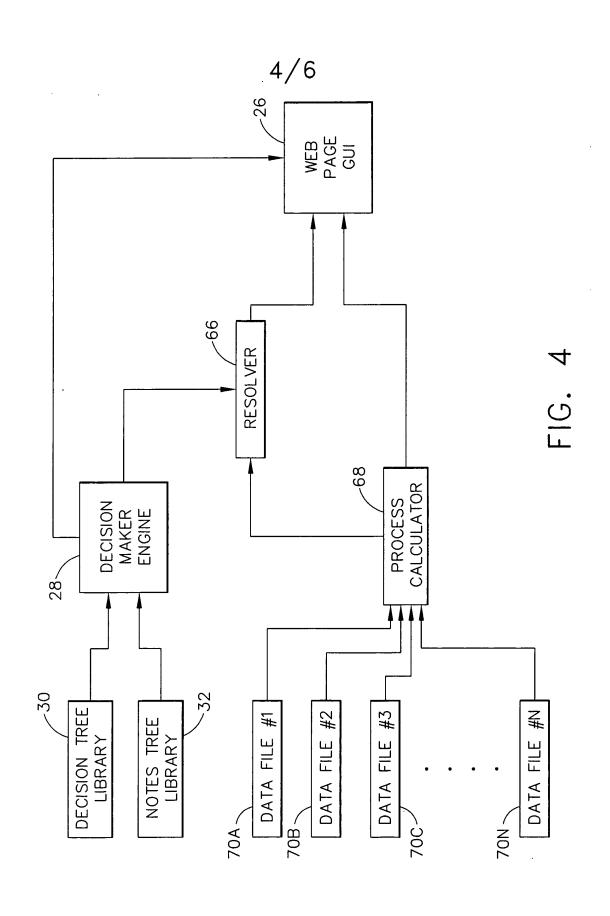


FIG. 3

REPLACEMENT SHEET PROCESS PLANNING FOR DISTRIBUTED MANUFACTURING AND REPAIR INVENTOR: CHRISTOPHER R. HARMMOND, et al. DOCKET: 13DV-13576

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48	5/6																
44	EXT NODE	-	4	2	3	5	4	5	9	7	8	8	6	10	10	11	999
-46	VALUE IN	ON		0.52						a			YES				
4	OPERATOR VALUE NEXT NODE	П		>						=			II				
42	CHARACTERISTIC	NORMAL ENTRY		SHAPED HOLE MINOR DIA.						P11TF12 CLASS			COUNTERBORE ?				
-38	DESCRIPTION	6.		ė		ROUGH ENDMILL	ENDMILL FLAT: SIZE=.437	ROUGH DRILL: U/SIZE=.012	FINISH PERIPHERAL MILL: U/SIZE=.005	ė		ABRASIVE FLOW POST-FIN: SIZE=.001 MIN	6.		COUNTERBORE	CHAMFERMILL TOP AND BOTTOM	BENCH EDGEBREAK: SIZE=320 GRIT B FLY
	TYPE	DECISION		DECISION		STEP	STEP	STEP	STEP	DECISION		STEP	DECISION		STEP	10 STEP	STEP
36	NODE INDEX	0		-		2	3	4	5	9		7	∞		6	10	11

FIG. 5

REPLACEMENT SHEET PROCESS PLANNING FOR DISTRIBUTED MANUFACTURING AND REPAIR INVENTOR: CHRISTOPHER R. HARMMOND, et al. DOCKET: 13DV-13576

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-62	ODE	999	666		999	999	666	0	222	999	999			999		999			999		999		999	-
	NEXT NODE				:																			
-58	<u> </u>					AL.								-		02					02		100	\dashv
	w		_		AFER	HER	AFER	10		HONE	ANT	FED DRILL		ANT	FED DRILL	0.002			010		0.00		0.001	
	VALU		THRU		CHAMFER	PERIPHERAL	CHA	חרם		FLEXHONE	000	FED		000	FEO				SHAPED					
	ATOR		AINS		AINS	AINS	AINS	VINIC	2	AINS	AINS			AINS										
09/	OPERATOR VALUE		CONTAINS		CONTAINS	CONTAINS	CONTAINS CHAMFER	TAGNITURNS STRIPLINGS		CONTAINS	CONTAINS COOLANT			CONTAINS COOLANT					CONTAINS				_	
																T0L.					10F.		20 NOTE ALIGN CUTTER FLUTES W/IN .0002 INCHES TRUE POSITION TOL.	
	CHARACTERISTIC															NOIT					TRUE POSITION TOL.		NOIT	
-56	ACTE		ASE		ESS	ESS	ESS	ι υ	2	ESS	ESS			ESS		POSI			ASE		POSI		POS	
	CHAR		FILEBASE		PROCESS	PROCESS	PROCESS	000	LINOCESS	PROCESS	PROCESS			PROCESS		ORKPIECE & SPINDLE ONLY AFTER TRUE POSITION TOL			FILEBASE		TRUE		TRUE	
			برا				FOR	COD	5	z	JIA.	Α.	EQʻD			FTER	·		<u>/</u>	ER	.0R		CHES	
		MES	ROXIMATELY .050 OVERTRAVEL				SECTION OF CUTTER FLUTE FOR	١.		FLEXHONE SPINDLE DIRECTION THRU HOLE PATTERN	10 NOTE ALTERNATE PACK DRILL CYCLE: 1/2 DIA.	DEEP; RETRACT FULLY; THEN 1/10 DIA.	AS R	S		LY A	THIS		18 NOTE WHEN SHAPED HOLE MILLING, ROUGH W/	CUI	19 NOTE CONSIDER HYDRAULIC TOOLHOLDERS FOR)2 IN	
		OD COOLANT AT ALL TIMES	OVER				SECTION OF CUTTER FLUTE S. ANOTHED FOR CINICUING	CECTION OF CLITTED CLITTE	ROUGHING; ANOTHER FOR FINISHING	E DIR	O.E.	N 1/	EAT	+0 +0	TING	E ON	WARMUP ROUTINE FOR THIS		G; RC	NEW	HOLD		00.	
-54		AT AI	020		9 <u>N</u>	NC INC			3 2 2 2 2 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3	PATT	CY L	当	<u>.</u>	F 20	NDED FOR CF DRILLING	DIND	JTINE		Ž	MITH	T001		N/W	ŀ
3		ANT ,	ELY.		M	T]W	15 G	֓֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֜֜֓֓֓֓֓֜֡֓֜֡	記点	AE SE	DRIL	יוורץ	<u>.</u>	RE 0	7. CF	S &	SZ Z		JE N	NISH	OLIC		UTES	ASS
		7000	(IMAT	STROKE	I WHILE MILLING	WHILE MILLING	CTION		ANOTI	25 E	PACK	ACT F	ACT F	ESSO	J (1)	PIECE	RMUF		H G	R; FII	YDRAI	ATION	R FL	-INISH PASS
	NOIL		PRO)			بــا	FE N		٦ ١ ١	記さ	ATE	RETR/	RETR/	IT PR	MENDI	WORK	G WA	ATION	SHAP	UTTE	ER H	PLIC	SUTTE	—
	SCRIF	OJY JSU	4 NOTE USE APP	N DRI	5 NOTE CLIMB MI	IMB.	7 NOTE USE ONE		, 2 2 2	9 NOTE REVERSE 1/2 WAY	TERN	EP;	EP.	JOLAN	RECOMME	14 NOTE ALIGN WO	NN S	APPLICAT	FN FN	SED C	DISNO	THIS APPLICATION) N9r	BEFORE
-52	oe De	TE US	TE US		TE OI	TE CL	TE US	≦ ≚ ⊒	- 2 ∝	TE RE	TE AI	<u> </u>	프	TE CC	<u>R</u>	TE Al	₹ :	A	TE W) O	TE CC	<u></u>	TE Al	<u>8</u>
	X	O NOTE	4 NO		2 NO	0N 9	0N Z	0	2	0N 6	<u> </u>			<u>8</u>		4 NO			8 NO		0N 6		0N 0	
-50	ode index type descript										_					_			-		-		2	
	ODE																							

FIG. 6